

AMENDMENT TO THE SPECIFICATION:

Please amend the paragraph bridging pages 3 and 4 as follows:

The inverter receives dc power from a dc source, 51, a filtering capacitor, C₁ is provided across the dc source input. In addition, a gate driver circuit 53 is provided to turn on or off the semiconductor switches, S₁-S₁₀ according to the control signals generated by the processor control circuit 54. A dc source 52 provides the dc bus voltage and this voltage is sensed through voltage sensor ~~53~~ 58 which is electrically connected to processor control circuit 54.

Please amend the paragraph bridging pages 4 and 5 as follows:

A single control circuit, typically based on a microprocessor or digital signal processor (DSP) 54, may be programmed to execute control algorithms for the two motors/generators 57, 62. With a proper control algorithm, the motors/generators 57, 62 can be run in either motoring mode, i.e., providing power to the motor shaft, or generating mode, in which power is transferred from the motor shaft to the inverter dc source. The motor/generator machines 57, 62 can be ac synchronous machines, ac induction machines or permanent magnet machines. Voltage and current sensors ~~53~~ 58, 56 may be used, if necessary, to measure the dc bus voltage and motor/generator currents, respectively. Other sensors such as speed sensors, position sensors or thermocouples may also be employed.